

Application No.: 10/519661
Docket No.: AD6871USPCT

MAR 28 2007

Page 6

REMARKS

As a preliminary matter, the withdrawal of the objection to claim 11 and of the rejection under 35 U.S.C. § 112 is acknowledged with gratitude. The Examiner is also thanked for the withdrawal of the rejection of claims 6, 7, 8, 10 and 11 citing European Patent No. 0 402 213, issued to Klock et al. (hereinafter "Klock"), and for the withdrawal of the rejection of claim 9 citing Klock in view of U.S. Patent No. 5,750,482, issued to Cummings.

The Official Action Issued on November 28, 2006, however, has rejected claims 6, 7, 8, 10 and 11 under 35 U.S.C. 103(a) as obvious over Klock in view of U.S. Patent No. 3,153,009, issued to Rombach et al. (hereinafter "Rombach"). In addition, claim 9 stands rejected under 35 U.S.C. 103(a) as unpatentable over Klock in view of Rombach and further in view of U.S. Patent 6,472,054, issued to Aurenty et al. (hereinafter "Aurenty"). Finally, claim 12 stands rejected under 35 U.S.C. 103(a) as unpatentable over Klock in view of Rombach further in view of U.S. Patent 5,559,175 issued to Kroggel et al. (hereinafter "Kroggel").

These are the sole substantive reasons set forth in the Official Action why the present claims should not be allowed. Applicants respectfully traverse these rejections for the reasons set forth below.

First, with respect to the rejection citing Klock in view of Rombach, Applicants note that the surfactants described by Klock are present in an amount of greater than 0.3 wt% or greater than 0.4 wt% based upon the dry weight of PVA (page 2 at lines 46 to 54). These high levels of surfactant are described as necessary to obtain a high level of meso rings, and therefore greater rigidity, in the PVB polymer (page 3 at lines 3 to 10).

Rombach, in contrast, teaches that using a lower amount of surfactant will reduce or eliminate haze in polyvinyl acetals. See column 1 at lines 32 to 36 and at line

Application No.: 10/519661
Docket No.: AD6871USPCT

Page 7

63 continuing to column 2 at line 3. For these reasons, Rombach permits only 0.04 to 0.2 wt% of surfactant, based on the weight of the polyvinyl alcohol. Column 2 at lines 16 to 21. Significantly, this range is mutually exclusive from the range of "greater than 0.3 wt%" that is described in Klock. Also in contrast to Klock, Rombach teaches that the use of higher levels of surfactants will affect other properties of the resin. The clear implication is that these effects will be adverse. Column 2 at lines 21 to 22.

Plainly, then, Klock and Rombach teach away from each other. It is well established that references may not be combined, when the references themselves teach away from their combination. See, e.g., M.P.E.P. at § 2145(X)(D)(2). Accordingly, it is improper to reject claims 6, 7, 8, 10 and 11 citing Klock in view of Rombach. Therefore, Applicants respectfully request that the rejection of claims 6, 7, 8, 10 and 11 under 35 U.S.C. § 103 citing Klock in view of Rombach be withdrawn upon reconsideration.

The rejections of claims 9 and 12 also rely on the combination of Klock and Rombach. Consequently, Applicants respectfully submit that these rejections are also improper, for at least the reasons set forth above with respect to the rejection of claim 6, and it is respectfully requested that these rejections also be withdrawn upon reconsideration.

In addition, Applicants offer the following comments with respect to Aurenty and Kroggel. Applicants are in agreement with the statement in the Official Action (at page 6) that Klock and Rombach do not teach or suggest the use of sodium methyl cocoyl taurate as a surfactant. Aurenty has been cited, however, in support of the proposition that sodium methyl cocoyl taurate is functionally equivalent to sodium dioctyl succinate, dodecyl benzenesulfonate, and several other surfactants. Office Action at page 6, Aurenty in column 6 at lines 57 to 64. This proposition may hold true in the art of preparing printing plates for ink application, to which the description of Aurenty pertains. The art of preparing printing plates, however, is completely inapposite to the field of the

Application No.: 10/519661
Docket No.: AD6871USPCT

Page 8

present invention, specifically, processes for preparing polyvinyl butyral compositions. Aurenty, in fact, includes no teaching or suggestion to include a polyvinyl acetal such as polyvinyl butyral in the fluid composition that is to include the surfactant. Column 2 at lines 13 to 22. Parenthetically, Applicants are aware that the use of poly vinyl butyral was raised as a hypothesis and dismissed by Aurenty, column 2 at lines 13 to 22. Rather, Aurenty requires an acid-functionalized polymer or copolymer. Column 5 at lines 31 to 50. Therefore, Applicants respectfully submit that a rejection citing Aurenty is improper in the present application. See, e.g., M.P.E.P. at § 2141.01(a)(I).

Likewise, with respect to claim 12, Applicants are once more in agreement with the statement in the Official Action (at page 6) that Klock and Rombach do not teach or suggest that the acid compound or mixture of acid compounds may comprise phosphoric acid.

Kroggel, however, is cited to support the proposition that all strong mineral acids are interchangeable in Applicants' claimed processes. Once more, this proposition may hold true in the art of synthesizing polyvinyl butyral dispersions, to which Kroggel pertains. It is inapposite, however, to Applicants' claimed processes. For example, Kroggel describes redispersible aqueous dispersions of polyvinyl acetals. Unlike the compositions that are the products of Applicants' claimed processes, however, the dispersions described by Kroggel are free of emulsifiers and surfactants. See Abstract of Kroggel. There is simply no reason why all strong mineral acids should be considered equivalent for Applicant's purposes, based on their purported equivalence in Kroggel's dispersions.

It follows by well-established doctrine that claim 12 is not obvious over Klock in view of Rombach, and in further view of Kroggel. Consequently, Applicants respectfully request that this rejection also be withdrawn upon reconsideration.

Application No.: 10/519661
Docket No.: AD6871USPCT

Page 9

As an ancillary matter, and further in connection with the processes described by Klock, Applicants respectfully take issue with the statement in the Official Action (page 4) that the M/R ratios of Klock's Examples 1 to 4 are within Applicants' claimed range of 2.5 to 5. See Table 1, below.

Table 1: M/R Ratios in Klock's Examples		
Klock Example Reference No.	Klock Reported Meso Level (%)	Corresponding M/R Ratio
Example 1	84.3	$84.3/15.7 = 5.4$
Example 2	84.5	$84.5/15.5 = 5.5$
Example 3	84.4	$84.4/15.6 = 5.4$
Example 4	85.0	$85.0/15.0 = 5.7$

Applicants further respectfully submit that these data are not consistent with the view expressed in the Official Action (page 4) that the PVB compositions prepared according to the process described by Klock inherently possess the same properties as the PVB resin compositions that are the products of Applicants' claimed process.

Restriction Requirement

The requirement for restriction that was set forth in the previous Official Action, issued on March 17, 2006, has now been repeated and made final. The grounds for this action appear to be that the claims lack unity because they had not yet been found to be patentable on November 28, 2006, the date of issue of the present Official Action. M.P.E.P. § at 1850(II).

Applicants respectfully submit, however, that claims 6 to 12 are indeed patentable, for at least the reasons presented hereinabove. Moreover, independent claims 1, 6 and 13 share a common technical feature that defines an invention over the prior art, specifically, the polyvinyl butyral (PVB) resin composition.

Application No.: 10/519661
Docket No.: AD6871USPCT

MAR 28 2007

Page 10

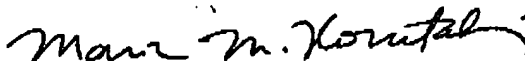
Accordingly, Applicants respectfully renew the request that the requirement for restriction be withdrawn upon reconsideration. In the alternative, Applicants intend to request the rejoinder of claims 1 to 5 and 13 to 18 upon indication of allowable subject matter in claims 6 to 12. M.P.E.P. at § 1893.03(d).

Conclusion

A Petition for an Extension of Time for one month and the required fee for the extension are filed concurrently herewith. Should any further fee be required in connection with the present response, the Examiner is authorized to charge such fee, or render any credit, to Deposit Account No. 04-1928 (E.I. du Pont de Nemours and Company).

In view of the foregoing, it is believed that pending claims 6 through 12 are in condition for immediate allowance, and such action is respectfully requested. Should the Examiner believe that an interview or other action in Applicants' behalf would expedite prosecution of the application, the Examiner is urged to contact Applicants' undersigned attorney by telephone at (302) 892-1004.

Respectfully submitted,



MARIA M. KOURTAKIS
ATTORNEY FOR APPLICANT
Kelly Law Registry on behalf of DuPont Legal
Registration No. 41,126
Telephone: (302) 892-1004
Facsimile: (302) 992-3257

Dated: March 28, 2007